

Title (en)

Method for producing ceramic devices by sintering in a low pO<sub>2</sub> atmosphere and using sintering additives comprising a transition metal

Title (de)

Verfahren zur Herstellung von Keramikvorrichtungen durch Sinterung mit einem Übergangsmetall behaltende Sinteradditiven in einer Atmosphäre mit niedrigem Sauerstoffpartialdruck

Title (fr)

Procédé de fabrication de dispositifs céramiques par frittage dans une atmosphère à faible pression partielle d' O<sub>2</sub> et à l'aide d'additifs de frittage comprenant un métal de transition

Publication

**EP 2503631 A1 20120926 (EN)**

Application

**EP 11002478 A 20110324**

Priority

EP 11002478 A 20110324

Abstract (en)

The present invention provides a method for producing a ceramic device in a low pO<sub>2</sub> atmosphere, comprising the steps of: - providing a composition comprising a base material and a transition metal; - forming a first layer of said composition; - optionally forming at least one layer on one side or both sides of said first layer; and - sintering the multilayer structure in a low pO<sub>2</sub> atmosphere; characterized in that - the amount of the transition metal is from 0.01 to 4 mol%, based on the composition of the first layer; - the oxygen partial pressure pO<sub>2</sub> is 10<sup>-14</sup> Pa or less; and - the sintering temperature is in the range of from 700 to 1600 °C.

IPC 8 full level

**H01M 8/12** (2006.01); **B01D 53/22** (2006.01); **B01D 67/00** (2006.01); **B01D 69/12** (2006.01); **B01D 71/02** (2006.01); **C01B 13/02** (2006.01); **C04B 35/44** (2006.01); **C04B 35/462** (2006.01); **C04B 35/486** (2006.01); **C04B 35/50** (2006.01); **C04B 35/64** (2006.01); **C23C 28/00** (2006.01); **H01M 4/88** (2006.01)

CPC (source: EP KR US)

**B01D 53/228** (2013.01 - EP US); **B01D 67/0041** (2013.01 - EP); **B01D 67/00414** (2022.08 - US); **B01D 69/12** (2013.01 - EP); **B01D 69/1213** (2022.08 - US); **B01D 69/1216** (2022.08 - US); **B01D 71/024** (2013.01 - EP); **B01D 71/0271** (2022.08 - US); **C01B 13/0255** (2013.01 - EP US); **C04B 35/44** (2013.01 - EP KR US); **C04B 35/462** (2013.01 - EP KR US); **C04B 35/486** (2013.01 - EP KR US); **C04B 35/50** (2013.01 - EP KR US); **C04B 35/64** (2013.01 - EP US); **H01M 4/88** (2013.01 - KR); **H01M 8/12** (2013.01 - KR); **H01M 8/1253** (2013.01 - EP US); **H01M 8/126** (2013.01 - EP US); **B01D 2323/10** (2013.01 - EP US); **C04B 2235/3208** (2013.01 - EP US); **C04B 2235/3224** (2013.01 - EP US); **C04B 2235/3225** (2013.01 - EP US); **C04B 2235/3229** (2013.01 - EP US); **C04B 2235/3251** (2013.01 - EP US); **C04B 2235/3274** (2013.01 - EP US); **C04B 2235/3286** (2013.01 - EP US); **C04B 2235/40** (2013.01 - EP US); **C04B 2235/404** (2013.01 - EP US); **C04B 2235/405** (2013.01 - EP US); **C04B 2235/616** (2013.01 - EP US); **C04B 2235/652** (2013.01 - EP US); **C04B 2235/656** (2013.01 - EP US); **C04B 2235/6562** (2013.01 - EP US); **C04B 2235/658** (2013.01 - EP US); **C04B 2235/6582** (2013.01 - EP US); **C04B 2235/6584** (2013.01 - EP US); **C04B 2235/75** (2013.01 - EP US); **C04B 2235/77** (2013.01 - EP US); **C04B 2235/775** (2013.01 - EP US); **H01M 4/8846** (2013.01 - EP US); **H01M 4/8857** (2013.01 - EP US); **H01M 4/8889** (2013.01 - EP US); **H01M 2008/1293** (2013.01 - EP US); **Y02E 60/50** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

Citation (applicant)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2503631 A1 20120926**; AU 2012231032 A1 20131010; CA 2830062 A1 20120927; CN 103460479 A 20131218; EA 201391347 A1 20140228; EP 2759015 A1 20140730; JP 2014510014 A 20140424; KR 20140016947 A 20140210; US 2014010953 A1 20140109; WO 2012126579 A1 20120927

DOCDB simple family (application)

**EP 11002478 A 20110324**; AU 2012231032 A 20120309; CA 2830062 A 20120309; CN 201280014872 A 20120309; EA 201391347 A 20120309;  
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US 201214005233 A 20120309